

the unit of sub-pixel obtained by dividing the target pixel in the main scan direction. On the other hand, a gamma correction section 16 subjects the gradation data received from the image data output device 10 to non-linear conversion so as to correct the non-linear curvature in the gradation property in a print section 22. Next, a density level setter 18 controls the density level for the data corrected by the gamma correction section 16, by using the density control parameter signals generated by the density level controller section 14 so as to change the center of gravity in density in the pixel. Thus, the density is controlled by the density level controller section 14 and the density level setter 18 in the unit of sub-pixel, and the data corrected by the gamma correction section 16 are converted to density levels (or digital gradation data) for printing in the unit of sub-pixel. A digital-to-analog (D/A) converter 20 converts a digital gradation data obtained by the density level setter 18 to an analog signal and outputs it to a laser driver in the print section 22. The print section 22 modulates the intensity of a laser beam in the unit of sub-pixel in accordance with the input signal. Thus a half-tone image is formed on a recording medium in raster scan.

IN THE CLAIMS:

Please amend claims 1, 15 and 18 as follows:

1. An image processor which processes multi-level image data on density levels of pixels, comprising:
an edge judgement circuit which discriminates an edge direction of a target pixel from differences in density level between the target pixel and adjacent pixels thereof based upon the multi-level image data; and